ALBA 510, 610, 710, 810.

Three valve, plus rectifier, three waveband superhet in table (810), *console* (610), *table radiogram* (510), *and console radiogram* (710) *forms. The* 510 *and* 710 *have push-buttons for switching and wave-changing. All in A.C and A.C./D.C. models; this sheet covers A.C. models only. Made by A. J. Balcombe, Ltd., 52-58, Tabernacle Street, London, E.C.2.*

Circuit.—Coupled circuits, with iron cores on M. and L.W., link the aerial to V1, a triode-hexode frequency-changer. The oscillator section is tuned-grid with separate anode-coupling coils on each band. Iron-core I.F. transformers, with trimmer condensers, lead to V2, a "sliding screen" pentode, and to V3, a combined double-diode output pentode.

A pick-up is connected through a small L.F. transformer, with switched secondary, to V2. The amplified signal is then developed across R17 and fed, via a further switch and C12, to the top of the volume control.

The radio signal is demodulated in the usual way. The A.V.C. circuit is orthodox, except that it is energised from the I.F. secondary.

Wavebands: 16.5–51, 200–560, 800–2,000 metres.

Models 510 and 710 have push-buttons for switching and wave-changing, but the chassis is otherwise the same as in the 810 and 610.

GANGING

I.F. CIRCUITS.—Adjust I.F. trimmers for maximum at 470 kc.

M.W. BAND.—At 250 metres, adjust T2 and T1. Pad at 500 metres with T3. Repeat operations.

L.W. BAND.—At 1,300 metres, adjust T5 and T4. Pad with T6 at 1,900. Repeat operations.

S.W. BAND.—At 19 metres, adjust T8 and T7. Padding is fixed.

VALVE VOLTAGES

V.	*Type.*	*Electrode.*	*Volts.*	*Ma.*
1	ECH2 ..	Anode	265	.3
		Screen	90	.5
		Osc. anode	105	7
2	EF9 ..	Anode	230	4.8
		Screen	105	2
3	EBL1 ..	Anode	250	40
(*All Mullard*)		Screen	265	6

Pilot lamps, 4.5 v., .2 amp.

CONDENSERS

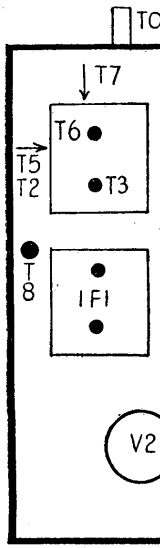
C.	*Mfds.*	*C.*	*Mfds.*
1 ..	200 mmfds.	11 ..	.1
2 ..	.05	12 ..	.005
3 ..	5 mmfds.	13 ..	100 mmfds.
4 ..	.1	14 ..	100 „
5 ..	.1	15 ..	50
6 ..	100 mmfds.	16 ..	.005
7 ..	.0025	17 ..	25
8 ..	.1	18 ..	16+16+8
9 ..	.05	19 ..	.001
10 ..	.1	20 ..	.1

RESISTANCES

R.	*Ohms.*	*R.*	*Ohms.*
1 ..	.25 meg.	10 ..	50,000
2 ..	100	11 ..	.5 meg.
3 ..	25,000	12 ..	.25 meg.
4 ..	50,000	13 ..	150
5 ..	200	14 ..	.5 meg.
6 ..	25,000	15 ..	.5 meg.
7 ..	.9 meg.	16 ..	1,000
8 ..	300	17 ..	5,000
9 ..	.5 meg.		

WINDINGS

L.	*Ohms.*	*L.*	*Ohms.*
1 ..	40	12 ..	4
2 ..	1.5	13 ..	4
3 ..	15	14 ..	300
6 ..	30	15, 16 ..	125
7 ..	50	19 ..	12
8 ..	3	20, 21 ..	1
9 ..	9	22 ..	700
10 ..	15	23 ..	400
11 ..	V. low		



Speaker leads are re for the field and red for speech. Red is both and black is